

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

967
72078
py 2

VOL. 2 NO. 32

DECEMBER 5, 1952

LIB
CURRENT SERIAL RECORD
★ JAN 30 1953 ★
U. S. DEPARTMENT OF AGRICULTURE

Cooperative
**ECONOMIC INSECT
REPORT**

Issued by

**BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
AGRICULTURAL RESEARCH ADMINISTRATION
UNITED STATES DEPARTMENT OF AGRICULTURE**

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

DIVISION OF INSECT DETECTION AND IDENTIFICATION

SECTION OF ECONOMIC INSECT DETECTION AND REPORTING

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Bureau serves as a clearing house and does not assume responsibility for accuracy of the material.

Reports and inquiries pertaining to this release should be mailed to:

Section of Economic Insect Detection and Reporting
Bureau of Entomology and Plant Quarantine
Washington 25, D. C.

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

COTTON STEM MOTH found on Long Island, New York. (page 414)

SUMMARY OF INSECT CONDITIONS in Maine (page 416), Iowa (page 419), Washington (page 421)

* * * * *

WEATHER FOR THE WEEK ENDING DECEMBER 2, 1952

Three periods of widespread precipitation east of the Continental Divide generally improved soil moisture conditions and replenished water supplies, although more moisture is still needed in sections of the lower Great Plains and the Southeast. During the movement of a general cyclonic storm from the lower Great Plains across the Lake region on the 25th and 26th, heavy rains fell in the central and lower Mississippi Valley and Midwest, and light to heavy snow in the central Great Plains and upper Mississippi Valley. Strong winds caused widespread minor damage and drifted the snow, blocking many roads. Glaze and wet snow caused additional damage to power and communication lines in some sections. Snow depths ranged up to 10 inches locally in Minnesota, Iowa, Kansas, Nebraska, and Wisconsin. Precipitation overspread the eastern third of the nation again on the 29th and 30th when 1 to 3 inches of snow fell from the Ohio Valley to the Atlantic Coast. At the end of the period, precipitation was falling over the Mississippi Valley and spreading eastward. Additional snowfall during this storm laid down a general snowcover north of the Ohio Valley. General snow and rain was falling in the Pacific States at the end of the period.

For the week temperatures averaged slightly above normal in New England, northern New York, and the Florida Peninsula. Elsewhere averages were below normal, with departures as much as 20° in the northern Rocky Mountains. The entire week was abnormally cold in the Rocky Mountain States, with subzero temperatures in northern and middle portions on several nights. West Yellowstone, Montana, recorded -36° on the 26th. Many streams and Lakes are frozen over in the extreme north-central interior west of the Mississippi River. (Summary Supplied by U. S. Weather Bureau)

* * * * *

Reports in this issue are for the week ending November 29 unless otherwise designated. CALIFORNIA notes, compiled by S. Lockwood, are for the month of November and are taken from reports and observations of County Agricultural Commissioners, Farm Advisors of the Extension Division, and entomologists of the University of California, the U. S. Department of Agriculture and the California Department of Agriculture.

* * * * *

CEREAL AND FORAGE INSECTS

GRASSHOPPERS (*Acrididae*) -- CALIFORNIA - Moved from range land and heavily infested pepperwood trees in Humboldt County.

GREENBUG (*Toxoptera graminum*) -- SOUTH CAROLINA - Infestations on grain have increased slightly in Charleston area, but seem largely confined to small portions of most fields. A hymenopterous parasite is fairly abundant. (Cuthbert and Deen)

CORN EARWORM (*Heliothis armigera*) -- CALIFORNIA - Medium infestations in corn and lettuce in Santa Barbara County. Five to 40 percent of corn ears were damaged in some fields in Kern County. Heavy infestations occurred in parts of Riverside County.

SALT-MARSH CATERPILLAR (*Estigmene acrea*) -- CALIFORNIA - Caused medium damage to alfalfa in Yolo County.

APHIDS (*Aphidae*) -- CALIFORNIA - Unidentified species were extremely heavy in some milo fields in Riverside County.

ALFALFA CATERPILLAR (Colias philodice eurytheme) -- CALIFORNIA -
Reported unusually light in Antelope Valley, Los Angeles County. Also
light in Yolo County.

CLOVER ROOT CURCULIO (Sitona hispidula) -- CALIFORNIA - Dis-
section of females collected in Modoc County during the last of October
showed 50 percent with eggs, 10 percent with 6 or less well developed
eggs, 15 percent with 7 to 12 eggs. Populations in Modoc County ranged
up to 28 adults per square foot; few last instar larvae and pupae in upper
inch of soil in 3 year old clover field.

FRUIT INSECTS.

CODLING MOTH (Carpocapsa pomonella) -- CALIFORNIA - Caused
moderate damage to apples in parts of San Diego County. Light damage
to pears but heavy to apples in Lassen County.

SHOT-HOLE BORER (Scolytus rugulosus) -- CALIFORNIA - Moderate
damage to stone fruits occurred in Santa Clara County.

SAN JOSE SCALE (Aspidiotus perniciosus) -- CALIFORNIA - Con-
siderable amounts of unmarketable apples were found in Humboldt
County.

GRAPE PHYLLOXERA (Phylloxera vitifoliae) -- CALIFORNIA - Light
to severe infestations reported in Tulare County vineyards.

GRAPE LEAF FOLDER (Desmia funeralis) -- CALIFORNIA - Heavy
in small areas of Fresno County. Infestation occurred during latter
part of growing season. Damage also reported from Kern County.
Severe infestations reported from Tulare County.

WALNUT HUSK FLY (Rhagoletis completa) -- CALIFORNIA - Light to
heavy infestations occurred in San Bernardino County walnut groves.

FLAT HEADED BORER (prob. Chrysobothris mali) -- CALIFORNIA -
Serious infestations in some walnut groves reported from Riverside
County.

CITRUS INSECT CONDITIONS IN CALIFORNIA DURING NOVEMBER

CITRUS RED MITE (Paratetranychus citri) light to medium in parts of Riverside County, medium in some Orange County groves, light to heavy in San Bernardino County, generally light on lemons in Santa Barbara County. Locally heavy infestations of GREENHOUSE THRIPS (Heliothrips haemorrhoidalis) and CITRUS THRIPS (Scirtothrips citri) occurred in orange groves in Orange County. CALIFORNIA RED SCALE (Aonidiella aurantii) infestations heavy locally in Orange County, light to medium on Santa Barbara County lemons, light to heavy in San Bernardino County. YELLOW SCALE (Aonidiella citrinia) ranging up to severe in Tulare County. BLACK SCALE (Saissetia oleae) ranged from light to heavy in San Bernardino County, medium local infestations in Orange County, spotted infestations in Santa Barbara County. Some heavy infestations of PURPLE SCALE (Lepidosaphes beckii) in orange groves in Santa Barbara County, medium infestation in some Orange County groves. SOFT SCALE (Coccus hesperidum) light to heavy in Tulare County citrus groves. CITRICOLA SCALE (Coccus pseudo-magnoliarum) severe in some Tulare County groves. CITRUS MEALY-BUG (Pseudococcus citri) light in 2,000 acres of citrus in San Diego County.

TRUCK CROP INSECTS

CABBAGE LOOPER (Trichoplusia ni) -- CALIFORNIA - Serious infestations occurred on lettuce in Riverside County. SOUTH CAROLINA - Moderate to heavy infestations continue on cole crops in Charleston area; many larvae in last instar. (Cuthbert and Deen)

APHIDS (Aphidae) -- VIRGINIA - Cabbage aphid (Brevicoryne brassicae) continues a problem to many growers of winter crucifers in Norfolk area. (Brubaker, Greenwood, Hofmaster) SOUTH CAROLINA - Turnip aphid (Rhopalosiphum pseudobrassicae) moderately abundant on turnip; light in some cabbage plant beds. Green peach aphid (Myzus persicae) also moderately abundant on turnip; appearing on spinach. Charleston area. (Cuthbert and Deen) TENNESSEE - Turnip aphids infesting commercial plantings of turnips in Scott County, November 16. (R. P. Mullett)

VEGETABLE WEEVIL (Listroderes costirostris obliquus) -- SOUTH CAROLINA - Narrow areas along ditches in some turnip plantings have moderate to heavy infestations of larvae; occasional larvae seen on young spinach, Charleston area. (Cuthbert and Deen) FLORIDA - Moderately heavy infestations on turnips in the Gadsden County area. (L. M; May)

BEE T ARMYWORM (Laphygma exigua) -- CALIFORNIA - Medium infestations occurred in beet fields in Yolo County.

SALT-MARSH CATERPILLAR (Estigmene acrea) -- CALIFORNIA - Medium damage to sugar beets and carrots occurred in Imperial County. Light damage to lettuce and beans in Riverside County. Barriers were used around lettuce fields, insecticides on beans. Heavy damage to chrysanthemums in San Mateo County.

ARTICHOKE FLUME MOTH (Platyptilia carduidactyla) -- CALIFORNIA - Damage in San Mateo County reported ranging from 10 to 50 percent of artichoke buds. Spotted infestations, some heavy, occurred in Santa Barbara County.

BANDED WOOLLYBEAR (Isia isabella) -- CALIFORNIA - Heavy damage occurred to spinach, romaine lettuce, lettuce and chard in San Mateo County.

TOMATO HORNWORM (Protoparce quinquemaculata) -- CALIFORNIA - Serious damage to potato vines reported from Kern County, but good insecticidal control obtained. Medium infestations reported from Riverside County.

GREENHOUSE WHITEFLY (Trialeurodes vaporariorum) -- CALIFORNIA - Reported fairly numerous in tomato and bean fields in San Diego County.

GRASSHOPPERS AND CRICKETS caused heavy damage to lettuce and carrots in Imperial County, CALIFORNIA during November.

TWO-SPOTTED SPIDER MITE (Tetranychus bimaculatus) -- CALIFORNIA - Heavy infestations in some strawberry fields reported from Santa Cruz County.

BLACK VINE WEEVIL (Brachyrhinus sulcatus) -- CALIFORNIA - Heavy infestations occurred in strawberry fields in Santa Barbara County.

STRAWBERRY CROWN MOTH (Ramosia bibionipennis) -- CALIFORNIA - Light to heavy in strawberry fields in Santa Cruz County. Heavy infestations reported in Santa Barbara County.

FULLER ROSE BEETLE (Pantomorus godmani) -- GEORGIA - Moderate infestation on African daisies and peppers in greenhouse at Experiment. Feeding on leaves and blossoms. (M. DuPree, Nov. 15)

COTTON INSECTS

SALT-MARSH CATERPILLAR (Estigmene acrea) -- CALIFORNIA - Heavy damage occurred during the fall in some cotton fields in western Fresno County. Heavy damage also reported from Riverside County.

COTTON STEM MOTH ON LONG ISLAND, NEW YORK -- Confirmation has just been received of the identity of a new lepidopterous pest of cotton in North America, Platyedra vilella Zeller. Mr. J. H. Mahaney, inspector at the port of New York, found a few larvae of this gelechiid feeding in hollyhock at Mineola, New York, during 1951 but no adults were obtained. Reexamination of the plants in July 1952 yielded an ample supply of larvae, pupae, and adults. Mr. H. W. Capps and Mr. J. F. Gates Clarke concur on the identity of this pest.

The literature reveals that it is known as the cotton stem moth. Host plants include various species of cotton, Gossypium spp.; Althaea nudiflora; marshmallow, Althaea officinalis; high mallow, Malva sylvestris; velvet treemallow, Lavatera arborea; and herb treemallow, Lavatera trimestris. Platyedra vilella is known to occur in France, Russia, the Caucasus, Transcaucasia, Iran, Iraq, and Morocco.

In 1932, the cotton stem moth caused serious damage to cotton in northern Persia. In Uzbekistan, it was found abundant on wild malvaceous plants in 1936. Since 1938, no reference to Platyedra vilella could be found in available literature. It is a very close relative of Pectinophora gossypiella Saund., pink bollworm; and Platyedra malvella Hb., hollyhock seed moth. (Div. Plant Quarantines, BEPQ)

FOREST INSECTS

VARIABLE OAK LEAF CATERPILLAR (Heterocampa manteo (Dblidy.)) -- SOUTH CAROLINA - Specimens determined as this species were collected by J. G. Watts from infested blackjack oaks September 25. Mr. Watts reports that the insect was causing extensive defoliation of blackjack oaks in Aiken and Lexington Counties.

INSECTS AFFECTING MAN AND ANIMALS

SCREW-WORM (Callitroga americana) -- CALIFORNIA - Severe infestations throughout Madera County during November.

CATTLE LICE -- UTAH - Reports of serious louse build-up in herds in Tooele and Millard Counties. (G. F. Knowlton, November 22)

IMPORTED FIRE ANT (Solenopsis saevissima v. richteri) -- TENNESSEE - Light infestation found in two locations in Memphis November 13; all colonies found treated. A light infestation was found in Memphis in 1950; however, that infestation was apparently eradicated. (G. H. Culpepper)

STORED PRODUCTS INSECTS

ANGOUMOIS GRAIN MOTH (Sitotroga cerealella) -- GEORGIA - Heavy infestation in stored barley in Spalding County, November 15. (Beckham and DuPrée).

WAX MOTH (Galleria mellonella) -- UTAH - Some beekeepers having considerable trouble with this pest in several parts of the State. (G. F. Knowlton, Nov. 21)

Recent Important Interceptions at Ports of Entry

Weevil larvae of the genus Premnotrypes have been intercepted recently in potato tubers in plane baggage from Colombia at New York (Nicolaides) and on two occasions in potatoes in ships' stores from Peru at Galveston (Beavers). Four species in this genus of Curculionidae are considered important pests of potato tubers in South America. They are not known to occur in the United States. Living larvae of a cossid, Dyspessa ulula (Bkh.) have been taken recently on five occasions in and with garlic in cargo from Italy at New York (Prentiss, Havel, Couture, and Burke). This insect has been reported attacking garlic and onions in temperate areas of Europe. It is not known to occur in the United States.

SUMMARY OF INSECT CONDITIONS - 1952

* * * * *

MAINE

First Records: DUTCH ELM DISEASE observed at Kittery and York. A PINE SAWFLY (Neodiprion americanum) observed at South Portland. (H. B. Peirson). A STINGING ANT (Myrmica (M.) laevinodis Nyl.) found in local outbreak at Eastport. (F. H. Lathrop).

Corn Insects: EUROPEAN CORN BORER (Pyrausta nubilalis) - J. H. Hawkins and J. J. Devitt - In the spring of 1952 overwintered larvae of European corn borer were much more abundant in Maine than at any time during the last seven years, with possible exception of 1948, the year of the last heavy outbreak. Unusually high temperatures accelerated the life processes of the insect. In central areas emergence of adults occurred 7 to 9 days earlier than the mean of the preceding five years, oviposition took place 10 to 11 days earlier, and egg masses hatched 12 to 13 days earlier than the five-year mean. Throughout most of the corn growing area the summer infestation generally was higher than last year, especially in market garden corn and in earlier planted canning varieties. Damage to ears of canning corn at the time of harvest was uneven, but generally lighter than the earlier abundance of borer indicated. The uneven survival rate may be in part attributed to heavy oviposition before many of the corn plants had matured sufficiently to be susceptible to an infestation.

The usual occasional evidence of establishment of the second generation of European corn borer in central Maine was observed. In the southwestern coastal area second-generation borers were unusually abundant and destructive during the last of August and September.

The almost complete lack of rain throughout most of the 1952 growing season stunted corn and greatly reduced the crop of salable ears. The heavier borer infestation reduced value of the 1952 crop and, to a considerable extent, discouraged use of insecticides for borer control.

The fall survey shows an abundant hibernating population of borers for the winter of 1952-53.

Fruit Insects: (F. H. Lathrop) BLUEBERRY MAGGOT (Rhagoletis pomonella) infestation was less severe on blueberries than for several years. The extremely dry summer adversely affected the flies and prolonged the effectiveness of control measures. GYPSY MOTH (Porthetria dispar) outbreak occurred on blueberry land in Hancock and Washington Counties. BLUEBERRY THRIPS (Frankliniella vaccinii) was somewhat less injurious than in previous years. EUROPEAN RED MITE (Metatransychus ulmi) caused severe injury in some apple orchards. Infestation generally was about the same as in 1951. APPLE MAGGOT (Rhagoletis pomonella) adults continued to emerge later than usual in 1952, and injury to apples increased somewhat, compared to 1951. Excellent control was obtained in commercial orchards. CODLING MOTH (Carpocapsa pomonella) infestation increased decidedly in some apple orchards during the summer with exceptionally hot, dry weather favoring development. GYPSY MOTH and EASTERN TENT CATERPILLAR (Malacosoma americanum) increased considerably on apple after several years of exceptionally light infestation.

Potato Insects: (G. W. Simpson). POTATO APHID (Macrosiphum solanifolii) was present on potato but did not cause as much damage as in 1951. Generally of little consequence on treated potatoes. BUCKTHORN APHID (Aphis abbreviata) also generally present on potato but was controlled satisfactorily, especially where applications of insecticides were started early. GREEN PEACH APHID (Myzus persicae) was virtually absent in 1952. Of some 20 thickets of wild plum observed in the spring, colonies were found in only one instance. Thus, it seems that this species did not overwinter with much success. Virus spread in the potato crop is expected to be slight as a result of this situation. FOXGLOVE APHID (Myzus solani) was generally light. Some early-season spread of leaf-roll in fields where this disease was present is believed due to this aphid. TARNISHED PLANT BUG (Lygus oblineatus) was unusually abundant and caused more damage than for many years; however, actual loss on potatoes from this insect is not believed to be great.

Truck and Garden Insects: TARNISHED PLANT BUG infestation was heavier than usual through much of the State. (F. H. Lathrop). CABBAGE APHID (Brevicoryne brassicae) was present in a number of small fields of broccoli planted for freezing. So abundant in some fields near end of season that much of the crop had to be discarded. This is the first damage

in a number of years. TOMATO HORNWORM (Protoparce quinque-maculata) was less abundant than usual. ROOT MAGGOTS caused more trouble than usual in onions and radishes. STEM BORERS were probably more abundant than usual causing general annoyance and some loss in small gardens. (G. W. Simpson, Northern Maine).

Forest Insects: (H. B. Peirson) ARBORVITAE LEAF MINER

(Argyresthia thuiella) outbreak has subsided. BALSAM WOOLLY APHID (Chermes piceae) outbreak has killed much balsam along the coast and in eastern Maine; now building up to the west in central Maine where its presence can be recognized by clumps of dying trees. BEECH SCALE

(Cryptococcus fagi) - severe outbreak in central and western sections

of the State. BIRCH LEAF MINER (Fenusa pusilla) caused heavy mining of leaves, particularly of gray birch, throughout all of the southern half

of the State. BIRCH LEAF-MINING SAWFLY (Phyllotoma nemorata) - light infestation at Southwest Harbor. BRONZE BIRCH BORER (Agrilus anxius) outbreak which killed over 70 percent of Maine's white and yellow birch has largely subsided. EASTERN TENT CATERPILLAR (Malacosoma americanum) was generally very abundant. ELM LEAF BEETLE

(Galerucella xanthomelaena) was very abundant in southern Maine. A widespread outbreak of FOREST TENT CATERPILLAR (Malacosoma disstria) in the Katahdin region was checked by parasites, but heavy moth

flights were picked up at light traps located in Denniston, Greenville, Enfield, Kellyland, and T9R5. MOUNTAINASH SAWFLY (Pristiphora geniculata) was generally abundant. OAK TWIG PRUNER was very

abundant in central and southern areas. PINE LEAF APHID (Pineus pinifoliae) caused heavy browning of white pine in western Maine. Local severe outbreaks of SATIN MOTH (Stilpnotia salicis) occurred in Augusta

and vicinity and in Houlton. SPRUCE BUDWORM (Choristoneura fumi-ferana), which remains the most serious threat to Maine's forests, was less prevalent this year except in the Cross Lake-Westmanland area

where conditions are still serious but do not yet warrant spraying. Prevailing southerly winds at the time of moth flights have apparently been a major factor in preventing heavy invasions of this insect from the provinces

There has been a noticeable increase in WHITE PINE WEEVIL (Pissodes strobi) throughout the State. Elm trap logs show the EUROPEAN ELM

BARK BEETLE in the southern tier of Maine towns bordering the New Hampshire line.

Miscellaneous Insects: HOUSE FLIES were increasingly abundant and very difficult to control, especially about barns and other farm buildings. (F. H. Lathrop)

* * * * *

IOWA - Reported by H. M. Harris

Field Crop Insects: EUROPEAN CORN BORER (Pyrausta nubilalis) more abundant in northern Iowa than in 1950 or 1951. Fewer acres treated than in either year. Fall population not as high as expected. CUTWORMS - particularly black cutworm (Agrotis ypsilon) caused major damage in flood plains of rivers. All damage in June. Glassy cutworm (Crymodes devastator) in 2 locations. ARMYWORM first brood did little damage except in western area. Second brood extremely abundant in lakes area of northern Iowa, migrating from oats into corn. Total area known to have been infested by second brood - about 250 acres. CHINCH BUG (Blissus leucopterus) - A few local migrations from wheat into corn in 3 southeast counties. Control measures not used before or during migration. GRASSHOPPERS - No reported outbreaks. CORN BILLBUGS - Local outbreaks in northern half of State in corn after timothy or bluegrass sod. CORN LEAF APHID (Aphis maidis) common in late fields and very heavy in some, but no serious outbreaks. HESSIAN FLY (Phytophaga destructor) - Spotty infestations in wheat growing counties. Harvest-time samples ranged from 0 to 24 "flaxseeds" per 100 stems, and averaged 215 "flaxseeds" per 100 plants. THISTLE CATERPILLAR caused moderate to heavy damage to soybeans in 70 counties in late May and early June. Defoliated thistles, then moved to beans. SPITTLEBUGS were present in small numbers in eastern counties at time of spring survey. GRAPE COLASPIS (Colaspis sp.) caused moderate leaf damage on red clover in southwest area. PEA APHID (Macrosiphum pisi) was serious on red clover and alfalfa. Some fields plowed up, some treated, others cut early, in southwest one-eighth of State. LYGUS BUGS (Lygus spp.) were normal in abundance. LESSER CLOVER LEAF WEEVIL (Hypera nigrirostris) - Leaf and head damage, heaviest in central area. CLOVER HEAD MOTH moderately abundant in north Iowa. CORN ROOTWORM (Diabrotica sp.) normally abundant. Lodging not as severe as in 1951, dry season sent roots deeper in 1952. CORN EARWORM (Heliothis armigera) less abundant in field corn than usual for State as a whole, but increased during the season and by October, 75 percent of ears in some fields in southeast Iowa showed injury. Very severe in early sweet corn.

Orchard Insects: APPLE MAGGOT (Rhagoletis pomonella) - Normal emergence of adults - June 28 at Ames, July 2-3 in north Iowa. Nearly 100 percent infestation in unsprayed trees in north 2 tiers of counties. GRAPE BERRY MOTH (Polychrosis viteana) damage reported from all parts of State. PLUM CURCULIO (Conotrachelus nenuphar) population continued high.

Vegetable Insects: MEXICAN BEAN BEETLE (Epilachna varivestis) was more abundant than usual in Lee, Des Moines, Louisa, Muscatine, Scott, Clinton, Jackson and Dubuque Counties. ONION MAGGOT (Hylemya antiqua) was very severe in north central Iowa. Untreated fields severely injured.

Shade Tree Insects: SPRING CANKERWORM (Paleacrita vernata) adult emergence began February 15 in northwest area, eggs hatched April 28-30. Very abundant along Missouri River. COTTONY MAPLE SCALE (Pulvinaria vitis) was extremely abundant on maples and elms in north half of State. In July and August, nymphs of this scale were numerous on leaves of grape, strawberry, dandelion, poplar, lilac, spirea and dogwood. SCURFY SCALE (Chionaspis furfura) was abundant on elm in northwest area. SPIDER MITES - Heavy populations on evergreens, privet, honeysuckle, elm, hackberry, rose, spirea, other woody shrubs and shade trees generally over State. WALNUT CATERPILLAR (Datana integerrima) - Fewer than normal. FALL WEBWORM (Hyphantria cunea) was heavier than normal on oaks in southern Iowa. SAWFLY - Larvae of unidentified species destroyed 30-40 percent of leaf surface of elms in some areas of central Iowa. WHITE-MARKED TUSSOCK MOTH (Hemerocampa leucostigma) was heavier than normal in south and central areas. GALL INSECTS - Maple bladder gall sent in from every county. Very abundant on soft maples. No midrib galls reported on maple; however, was very abundant in 1949. BOXELDER BUG (Leptocoris trivittatus) practically disappeared. Very heavy population 1950; fewer in 1951.

Livestock Insects: CATTLE GRUBS - There were more grubs in the backs of shipped in feeder calves in 1952 than the previous 3 years. CATTLE LICE - The little red chewing louse was particularly abundant and appears to be increasing. CATTLE MANGE - There was a minor outbreak of Sarcoptes scabiei var. bovis during the winter of 1952. Considerably more common than any previous year since 1947. Other species causing cattle mange were no more abundant than usual. HOG MANGE -

Sarcoptes scabiei var. suis is becoming less common year by year as swine producers learn adequate controls. SHEEP-TICK (Melophagus ovinus) very common on sheep but perhaps slightly less than former years. SHEEP SCAB MITE (Psoroptes equi var. ovis) - Thirty-three counties had flocks of sheep quarantined and treated due to scabies in 1952. SHEEP BOT FLY (Oestrus ovis) is present in about 10 percent of native sheep according to a survey of sheep posted at the Iowa State College veterinary clinic. HUMAN FLEA (Fulex irritans) was very abundant on several farms in a sandy area in Johnson County. WOOD-TICK populations somewhat lower than previous few years. There were no known outbreaks of HORSE FLIES. The following pests were about normal in occurrence during 1952: hog lice, poultry mites and lice, brown dog tick, stable flies, horn flies.

* * * * *

WASHINGTON - Reported by H. S. Telford
Few serious insect outbreaks occurred during the 1952 season.

Cereal and Forage Insects: SWEETCLOVER WEEVIL (Sitona cylindricollis) was reported at Cheney for the first time, but circumstantial evidence indicates that the insect had been in the State for some years. Damage was restricted largely to sweetclover. A TETRANYCHID MITE (Paratetranychus pratensis) on grass caused some trouble on a wide range of grass varieties grown for seed. This mite, previous to 1951, was not known to be an economic pest in Washington. It was first described from timothy by Banks at Pullman in 1912. SPIDER MITES appear to be more troublesome yearly, partly due to attacks on crops heretofore thought to be tolerant and also to alleged resistance to certain acaricides, particularly the organo-phosphates. MORMON CRICKETS have maintained low populations and GRASSHOPPERS are on the increase on both range and crop land.

Fruit Insects: PEACH SILVER MITE (Vasates cornutus) caused severe damage to peaches late in the season in the Wenatchee and Yakima Valleys. CODLING MOTH (Carpocapsa pomonella) damage was still at a comparatively low level, although some growers experienced difficulty

in controlling the insect. CHERRY FRUIT FLY (Rhagoletis cingulata) caused much less damage in eastern Washington than formerly. This was due largely to failure to emerge in appreciable numbers from the soil until after fruit harvest.

Vegetable Insects: PEA WEEVIL (Bruchus pisorum) has increased during the past three years. More damage occurred this year due, in part, to a heavier carry-over. Considerable control was necessary for PEA APHID (Macrosiphum pisi). IRIS WHITEFLY (Aleyrodes spiraeoides) is becoming increasingly abundant on potatoes in eastern Washington. Light and occasional infestations of BEAN APHID (Aphis fabae) in western Washington on weeds may be an indication of a heavier seasonal build-up in 1953.

* * * * *

BENEFICIAL INSECTS -- CALIFORNIA - In San Diego County, Comperiella sp. was reported actively parasitizing red scale in areas miles from any liberations. Physcus sp. was recovered from purple scale. In San Joaquin County, parasites, Aphytis, Aspidiotiphagus and Chilocorus, of the olive scale "are surviving and showing promise of control." The insect disease, Beaveria globulifera, determined by Dr. C. G. Thompson of the University of California, is reported by L. White, Agricultural Commissioner of Modoc County, to have infested most of the clear-winged grasshopper (Camnula pellucida) in that county. Few gravid females are left. Sarcophagid flies parasitized numbers of a scanty population of red-legged grasshopper (Melanoplus femur-rubrum) in Modoc County.

